In the Claims

1 (currently amended). A method of targeting integration of a transgene comprising retrovirus-like nucleic acid into a eukaryotic genome, in which the genome is targeted by a restriction enzyme that ~~bind~~ binds nucleic acid and the transgene is introduced at the binding site, wherein the endonuclease is specific to a site in an abundant rDNA locus and is fused to an integrase that mediates the introduction of the transgene.

2 (currently amended). ~~A~~ The method according to claim 1, wherein the genome is human.

3 (currently amended). ~~A~~ The method according to claim 1 ~~or claim 2~~, wherein the integrase is a lentivirus integrase.

4 (currently amended). ~~A~~ The method according to ~~claim 3.~~ claim 3, wherein the integrase is a HIV-1 integrase.

5 (currently amended). ~~A~~ The method according to ~~any preceding claim~~ claim 1, wherein the endonuclease is I-PpoI.

6 (original). A fusion protein which comprises an endonuclease as defined in claim 1 fused to an integrase as defined in claim 1.

7 (currently amended). ~~A~~ The fusion protein according to claim 6, which ~~is of~~ comprises an HIV-1 integrase and I-PpoI.

8 (new). The method according to claim 2, wherein the integrase is a lentivirus integrase.

9 (new). The method according to claim 8, wherein the integrase is an HIV-1 integrase.

10 (new). The method according to claim 2, wherein the endonuclease is I-PpoI.

11 (new). The method according to claim 3, wherein the endonuclease is I-PpoI.

12 (new). The method according to claim 4, wherein the endonuclease is I-PpoI.

13 (new). The method according to claim 8, wherein the endonuclease is I-PpoI.

14 (new). The method according to claim 9, wherein the endonuclease is I-PpoI.